

Patent Application US/07/715,272

#2

SEQUENCE LISTING

(1) GENERAL INFORMATION:

(i) APPLICANT: Carter, Paul J.
Presta, Leonard G.

(ii) TITLE OF INVENTION: Immunoglobulin Variants

(iii) NUMBER OF SEQUENCES: 10

(iv) CORRESPONDENCE ADDRESS:

(A) ADDRESSEE: Genentech, Inc.
(B) STREET: 460 Point San Bruno Blvd
(C) CITY: South San Francisco
(D) STATE: California
(E) COUNTRY: USA
(F) ZIP: 94080

(v) COMPUTER READABLE FORM:

(A) MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
(B) COMPUTER: IBM PC compatible
(C) OPERATING SYSTEM: PC-DOS/MS-DOS
(D) SOFTWARE: patin (Genentech)

(vi) CURRENT APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE: 14-June-1991
(C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

(A) APPLICATION NUMBER:
(B) FILING DATE:

(viii) ATTORNEY/AGENT INFORMATION:

(A) NAME: Adler, Carolyn R.
(B) REGISTRATION NUMBER: 32,324
(C) REFERENCE/DOCKET NUMBER: 709

(ix) TELECOMMUNICATION INFORMATION:

(A) TELEPHONE: 415/266-2614
(B) TELEFAX: 415/952-9881
(C) TELEX: 910/371-7168

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 amino acids
(B) TYPE: amino acid
(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

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54  Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
55      1                      5                      10                      15
56
57  Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Asn
58      20                      25                      30
59
60  Thr Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
61      35                      40                      45
62
63  Leu Leu Ile Tyr Ser Ala Ser Phe Leu Glu Ser Gly Val Pro Ser
64      50                      55                      60
65
66  Arg Phe Ser Gly Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile
67      65                      70                      75
68
69  Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
70      80                      85                      90
71
72  His Tyr Thr Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu
73      95                      100                     105
74
75  Ile Lys Arg Thr
76      109
77
78  (2) INFORMATION FOR SEQ ID NO:2:
79
80      (i) SEQUENCE CHARACTERISTICS:
81          (A) LENGTH: 120 amino acids
82          (B) TYPE: amino acid
83          (D) TOPOLOGY: linear
84
85      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:
86
87  Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
88      1                      5                      10                      15
89
90  Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Asn Ile Lys
91      20                      25                      30
92
93  Asp Thr Tyr Ile His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
94      35                      40                      45
95
96  Glu Trp Val Ala Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr
97      50                      55                      60
98
99  Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser
100      65                      70                      75
101
102  Lys Asn Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
103      80                      85                      90
104
105  Thr Ala Val Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr
106      95                      100                     105

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107
108 Ala Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
109 110 115 120
110
111

112 (2) INFORMATION FOR SEQ ID NO:3:

113

114 (i) SEQUENCE CHARACTERISTICS:

115 (A) LENGTH: 109 amino acids

116 (B) TYPE: amino acid

117 (D) TOPOLOGY: linear

118

119 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

120

121 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
122 1 5 10 15
123

124 Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Ser
125 20 25 30
126

127 Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
128 35 40 45
129

130 Leu Leu Ile Tyr Ala Ala Ser Ser Leu Glu Ser Gly Val Pro Ser
131 50 55 60
132

133 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
134 65 70 75
135

136 Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
137 80 85 90
138

139 Tyr Asn Ser Leu Pro Tyr Thr Phe Gly Gln Gly Thr Lys Val Glu
140 95 100 105
141

142 Ile Lys Arg Thr
143 109
144

145 (2) INFORMATION FOR SEQ ID NO:4:

146

147 (i) SEQUENCE CHARACTERISTICS:

148 (A) LENGTH: 120 amino acids

149 (B) TYPE: amino acid

150 (D) TOPOLOGY: linear

151

152 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

153

154 Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
155 1 5 10 15
156

157 Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser
158 20 25 30
159

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160 Asp Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
161 35 40 45
162
163 Glu Trp Val Ala Val Ile Ser Glu Asn Gly Gly Tyr Thr Arg Tyr
164 50 55 60
165
166 Ala Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Ala Asp Thr Ser
167 65 70 75
168
169 Lys Asn Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
170 80 85 90
171
172 Thr Ala Val Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr
173 95 100 105
174
175 Ala Met Asp Val Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
176 110 115 120
177
178

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 109 amino acids

(B) TYPE: amino acid

(D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

188 Asp Ile Val Met Thr Gln Ser His Lys Phe Met Ser Thr Ser Val
189 1 5 10 15
190
191 Gly Asp Arg Val Ser Ile Thr Cys Lys Ala Ser Gln Asp Val Asn
192 20 25 30
193
194 Thr Ala Val Ala Trp Tyr Gln Gln Lys Pro Gly His Ser Pro Lys
195 35 40 45
196
197 Leu Leu Ile Tyr Ser Ala Ser Phe Arg Tyr Thr Gly Val Pro Asp
198 50 55 60
199
200 Arg Phe Thr Gly Asn Arg Ser Gly Thr Asp Phe Thr Phe Thr Ile
201 65 70 75
202
203 Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Gln
204 80 85 90
205
206 His Tyr Thr Thr Pro Pro Thr Phe Gly Gly Gly Thr Lys Leu Glu
207 95 100 105
208
209 Ile Lys Arg Ala
210 109
211

(2) INFORMATION FOR SEQ ID NO:6:

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213

214 (i) SEQUENCE CHARACTERISTICS:

215 (A) LENGTH: 120 amino acids

216 (B) TYPE: amino acid

217 (D) TOPOLOGY: linear

218

219 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

220

221 Glu Val Gln Leu Gln Gln Ser Gly Pro Glu Leu Val Lys Pro Gly

222 1 5 10 15

223

224 Ala Ser Leu Lys Leu Ser Cys Thr Ala Ser Gly Phe Asn Ile Lys

225 20 25 30

226

227 Asp Thr Tyr Ile His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu

228 35 40 45

229

230 Glu Trp Ile Gly Arg Ile Tyr Pro Thr Asn Gly Tyr Thr Arg Tyr

231 50 55 60

232

233 Asp Pro Lys Phe Gln Asp Lys Ala Thr Ile Thr Ala Asp Thr Ser

234 65 70 75

235

236 Ser Asn Thr Ala Tyr Leu Gln Val Ser Arg Leu Thr Ser Glu Asp

237 80 85 90

238

239 Thr Ala Val Tyr Tyr Cys Ser Arg Trp Gly Gly Asp Gly Phe Tyr

240 95 100 105

241

242 Ala Met Asp Tyr Trp Gly Gln Gly Ala Ser Val Thr Val Ser Ser

243 110 115 120

244

245

246 (2) INFORMATION FOR SEQ ID NO:7:

247

248 (i) SEQUENCE CHARACTERISTICS:

249 (A) LENGTH: 27 bases

250 (B) TYPE: nucleic acid

251 (C) STRANDEDNESS: single

252 (D) TOPOLOGY: linear

253

254 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

255

256

257 TCCGATATCC AGCTGACCCA GTCTCCA 27

258

259

260

261 (2) INFORMATION FOR SEQ ID NO:8:

262

263 (i) SEQUENCE CHARACTERISTICS:

264 (A) LENGTH: 31 bases

265 (B) TYPE: nucleic acid

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266 (C) STRANDEDNESS: single
267 (D) TOPOLOGY: linear
268
269 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
270

271
272 GTTTGATCTC CAGCTTGGA CXXC^{Xs}CCGA A 31
273
274
275

are not valid according
to the rule.

276 (2) INFORMATION FOR SEQ ID NO:9:
277

278 (i) SEQUENCE CHARACTERISTICS:
279 (A) LENGTH: 22 bases
280 (B) TYPE: nucleic acid
281 (C) STRANDEDNESS: single
282 (D) TOPOLOGY: linear
283

284 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:
285

286
287 AGGTXX^XCT GCAG^XAGT^XGG 22
288
289
290

291 (2) INFORMATION FOR SEQ ID NO:10:
292

293 (i) SEQUENCE CHARACTERISTICS:
294 (A) LENGTH: 34 bases
295 (B) TYPE: nucleic acid
296 (C) STRANDEDNESS: single
297 (D) TOPOLOGY: linear
298

299 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:
300

301
302 TGAGGAGACG GTGACCGTGG TCCCTTGGCC CCAG 34

PAGE: 1

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/07/715,272

DATE: 06/25/91
TIME: 10:32:20

LINE ERROR

ORIGINAL TEXT

272	Wrong Nucleic Acid Designator	GTTTGATCTC CAGCTTGGTA CXXXDCCGA A 31
269	Entered and Calc. Seq. Length differ	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:
287	Wrong Nucleic Acid Designator	AGGTXXAXCT GCAGXAGTCX GG 22
284	Entered and Calc. Seq. Length differ	(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

PAGE: 1

SEQUENCE MISSING ITEM REPORT
PATENT APPLICATION US/07/715,272

DATE: 06/25/91
TIME: 10:32:20

MANDATORY IDENTIFIER THAT WAS NOT FOUND

PAGE: 1

SEQUENCE CORRECTION REPORT
PATENT APPLICATION US/07/715,272

DATE: 06/25/91
TIME: 10:32:20

LINE ORIGINAL TEXT

CORRECTED TEXT